Install Document
PEAP Supplicant Client
Odyssey Client

For State of Utah WAN Customers
Participating in the State Interoperable Wireless LAN System

Version 1.4
Revised 04/09/04

Document Information

This document was created for the purpose of describing configuration of PEAP Supplicant Client Software for use on the State of Utah Interoperable Wireless LAN system.

Document Revision

Date of Change	Changes	Change(s) Made	Reason for Change
03/17/04	Reviewed and completed.		Customer and internal review.
03/22/04	Formatting edits.	Fit into external document format.	Version 1.1
04/05/04	Final Version	Correction	Final Version 1.2
04/09/04	Lisa Review	Substituted some graphics that don't show old SSID.	Final Version 1.3
04/12/04	Lisa Review	Graphic with new SSID. Grammer fix.	Final Version 1.4

Scope of Document

This document is an instruction manual for the configuration of the State Interoperable Wireless LAN system.

Using this manual, a LAN Administrator should be able to configure Client Software on agency users' devices in order to connect to the common access state interoperable 802.11b Wireless LAN environment.

Step-by-step instructions are provided.

Document Contents

The following sections comprise this document:
- 802.11 Wireless LAN Product Requirements
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802.11 Wireless LAN Product Requirements

Please refer to the Standards and Architecture Document for State Interoperability: 802.11b Wireless environment with port level security (IEEE 802.1x), Version 1.2, January 29, 2004. This document was developed by the ITS 802.11 Wireless LAN product team to describe the technical architecture underlying the state interoperable 802.11 Wireless LAN system.

This document also lists the components—including wireless adapters, by model, that comply with and have been tested to work as part of the system.

As specified in the Standards and Architecture document, PEAP Supplicant Client Software standards were selected with the following requirements in mind:
- 802.1x compliant and PEAP authentication capable.
- Extensible Authentication Protocol—validating against the Utah Master Directory (UMD).
- Enterprise-class deployment, availability and supportability.
- Optional: Multiple Wireless LANs—designated by SSIDs (Service Set Identifiers) associated with 802.1q VLAN tagging.

Odyssey Client Overview

The Odyssey Client provides easy and secure connection to the State Interoperable 802.11 Wireless LAN system. The Odyssey Client performs the following tasks:

- Configure and control the device's wireless adapter.
- Connect to access points as well as to peer-to-peer networks.
- Configure authentication profiles to allow connections to multiple networks with different credentials.
- Use 802.1X to authenticate to the network.
- Use a wide variety of authentication methods to keep credentials secure.

The Odyssey Client can manage many different wireless adapters. Tested adapters are listed in Standards and Architecture Document for State Interoperability: 802.11b Wireless environment with port level security (IEEE 802.1x), Version 1.2, January 29, 2004.

Install Odyssey Software from CD

1. Place the Odyssey Client Software CD into the drive.

2. Run SETUP.EXE to begin installation.

3. Select the applicable platform.

4. Accept the license agreement by entering user name and organization.

    Enter license key. If Odyssey is purchased from ITS, the license will be issued at time of purchase. If purchased from Funk Software, license agreement is included in the package from Funk Software.

5. Choose to install Complete or Custom.

    Custom gives you the ability to change the components that are being installed.

    The default for both Complete and Custom is all components.

    Choosing Custom allows you to **not** install the Odyssey Client Administration component.

6. After initial phase of install is complete, you have the option to launch the Odyssey Client Manager to configure the Client.

    You may see the prompt, "If you haven't installed your wireless adapter, install it now." **Note: Configuration is only for the local user logged in at the time of installation.**

Configure Software

Use the Odyssey Client Manager to configure the wireless connection. The Odyssey Client Manager consists of five panels:
- Connection
- Profiles
- Networks
- Auto-Scan Lists
- Trusted Servers
- Adapters.

In the following instructions, **bold highlighted** items are those that need to be added or modified.

Networks Panel

Configure settings for the state interoperable network and any other wireless network(s) to which you authorize your users.
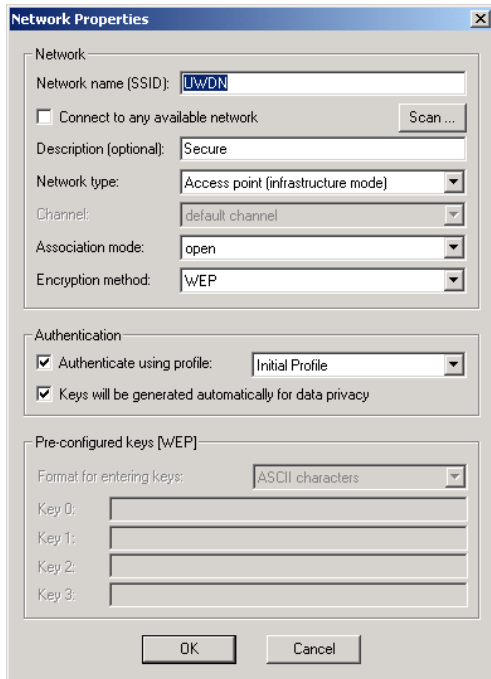
UWDN is the SSID (Server Set ID), or the public name of the State Interoperable Wireless LAN System.

Setting the SSID to UWDN provides users access to the same resources available through their wired network.

To add the UWDN network:

1. Highlight the Networks panel.

    Click on Add...

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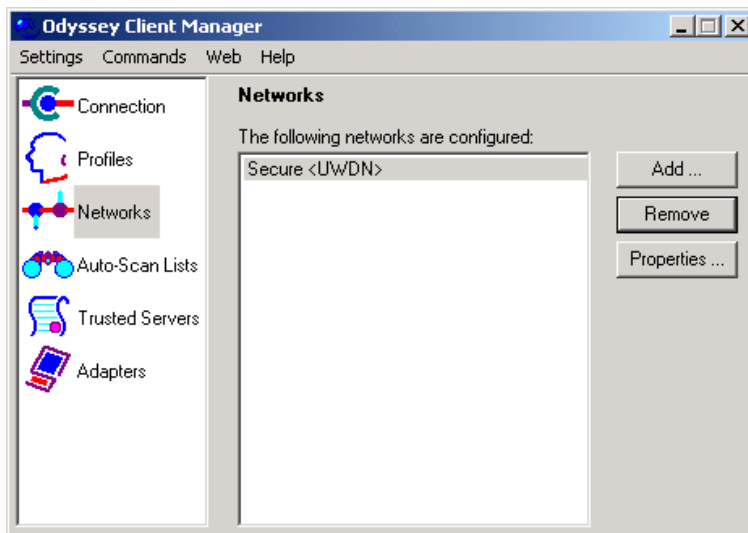
2. Network name (SSID): **UWDN**

   The Network name is case-sensitive and must be typed exactly as shown. Note: The ITS temporary test SSID was St8ofUtahEAPNet. .

3. Description (optional): It is useful to name or otherwise distinguish the type of network.

4. Encryption method: **WEP**

5. Check Authenticate using profile: **Initial Profile** (default)

6. Check **Keys will be generated automatically for data privacy**.

7. Click on OK to save changes.

Profiles Panel

The Profiles panel contains information necessary to authenticate a client device to the network. The Profiles panel includes information such as login name, password and authentication protocols. Multiple profiles can be created. For the State Interoperable 802.11 Wireless LAN system, use the default "Initial Profile."

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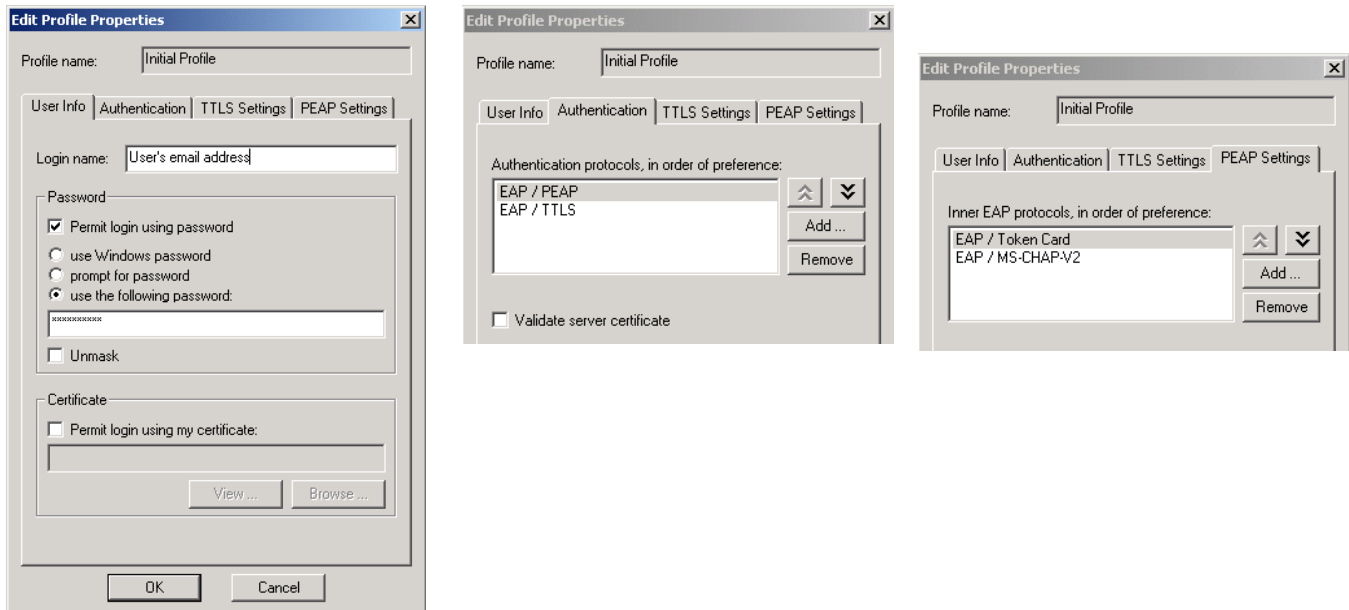
1. Highlight the Profiles panel

2. Highlight the Initial Profile.

   Click on Properties

3. User Info tab:

   a. Login name: <**wireless user's Email address>** (e.g., jdoe@utah.gov).

   b. Check **Permit login using password**

   c. Use the following password: <**user's LAN password**>.

4. Authentication tab:

   a. Click on Add…

   b. Select: **EAP/PEAP**.

   c. Highlight EAP/PEAP.

      Uncheck "Validate server certificate" and move EAP/PEAP to the top of the list.

5. TTLS Settings tab:

   a. Inner authentication protocol: **PAP**

6. PEAP Settings tab:

   a. Click on Add...

   b. Select: **EAP/Token Card.**

c. Highlight EAP/Token Card and move it to the top of the list.

d. Click on OK.

Auto-Scan Panel

The Auto-Scan panel is used to associate an ordered group of wireless networks to enable the wireless device to automatically switch between available networks.

As an example, if there are multiple available wireless networks, creating an auto-scan list with all the networks identified allows the user to automatically switch between the networks without having to change the network connection via the Connection panel (Connect to Network).

1. Highlight Auto-Scan panel. Click on Add…

2. Auto-Scan list name: <**name for list**>.

   Highlight the networks created in the Networks panel, on the left side of the window under Available networks.

   Move them to the right side of the window—Networks in list, in priority order.

   Move the network you want as the default connection to the top of the list to make it the primary network for association.

3. Click on OK.

Adapters Panel

The Adapters panel lists all the wireless (and wired) adapters configured for the Odyssey Client. The Client automatically discovers wireless adapters. If no adapters display, make sure the adapter has been installed in the device prior to configuration of the Odyssey Client.

Connections Panel

The Connections panel allows you to select a wireless adapter, establish connection and display current connection information.

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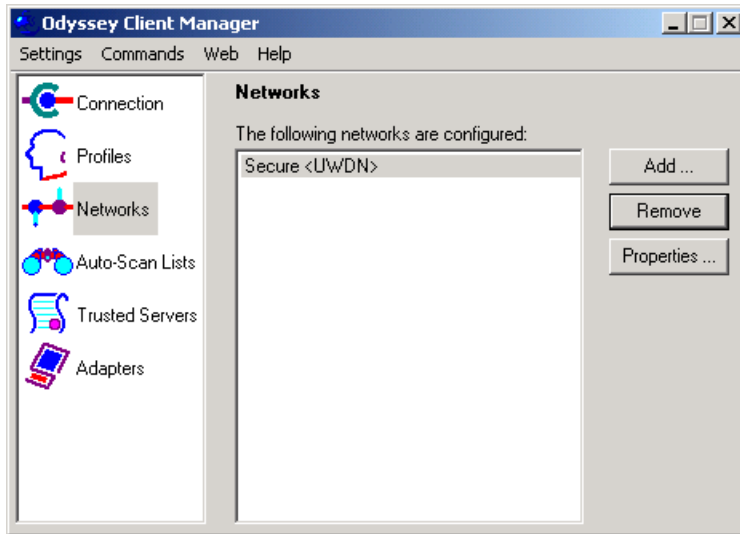
1. Highlight the Connections panel.

2. Select the applicable wireless adapter if not already displayed.

3. Check Connect to network:

   a. If you want to automatically switch between multiple networks, choose the list you defined via the Auto-Scan panel.

   b. If you want to manually select networks, choose either the **UWDN** or any other network you have defined.

   c. Once connected to a wireless network, you will see current connection information.

   d. Status displays the current status of your connection to the network. When connected to UWDN you should see: "open and authenticated."

   e. Elapsed time displays the time that has elapsed since the current connection was established.

   f. Network (SSID) is the public name of the wireless access point/network to which you are connected (e.g., UWDN).

   g. Access point displays the MAC address of the access point to which you are connected.

   h. Packets in/out displays the total number of packets received and transmitted since connection began

Configuration of the Odyssey Client is complete.

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Things to Inform Users

1. Before users can authenticate to the UWDN wireless network, they must be provisioned as an authorized user in the Utah Master Directory. To request access, users should go to the following URL for the access request form:
   http://its.utah.gov/productsservices/wirelessnetwork/wirelessdata/productfeatures.htm

2. When users first boot up their device and are attached via wireless only, remember to have them check "Workstation Only" on the login screen.

   Once Windows is loaded, the Odyssey Client loads and tries to connect to whatever wireless network has been specified in the Odyssey Client Manager.

   Once Odyssey is loaded, there will be a sailboat icon in the system tray. If Odyssey successfully connects, the sailboat will turn blue. Drag your cursor over the icon and it will display "open and authenticated" when connected to UWDN.

3. Once connected, if users want access to mapped Novell drives, etc., remember to tell them to login by right-clicking on the red "N" in the system tray and select Netware login….

4. If the user **does not** need to access mapped Novell drives, etc., and only needs Internet and GroupWise web access, then they do not need to login to the Novell client.

5. When a user's LAN password expires, the password in the Odyssey Client configuration **does not** automatically change. The user must update their LAN password using the Odyssey Client Manager.

   Show the user how to load the Odyssey Client Manager—by double-clicking on the sailboat icon in the system tray.
   - Highlight the Profiles panel.
   - Highlight "Initial Profile" and click on Properties.
   - On the User info tab, make sure "Permit login using password" is checked and "use the following password:" is selected.
   - Enter new LAN password. Click on OK to save changes.

6. The wireless adapter may have its own user interface software to help control its operation. This software **may** allow users to operate non-standard features of the wireless adapter, to which the Odyssey Client Manager has no access. In most cases, the Odyssey Client Manager and the user interface that comes with the wireless adapter can coexist without problems. However, users should avoid using both products for similar purposes. If users use Odyssey for network communications, use the adapter's user interface only to operate any features that cannot be controlled by the Odyssey Client Manager.

Verify that Setup and Configuration is Working

1. Does the Odyssey sailboat icon display in the system tray? If so, the Odyssey Client Manager has been installed.

2. Is the Odyssey sailboat icon blue? This may or may not be easily visible depending on your color scheme. If the sailboat icon is blue, the Odyssey Client is connected to an access point.

3. Place your cursor over the Odyssey sailboat icon to display connection status. To view additional information graphics and detailed status, load the Odyssey Client Manager by double-clicking on the Odyssey sailboat icon in the system tray.

   a. Connection status. The connection status button—the Odyssey "sailboat" icon, shows the state of your connection and whether you are authenticated.
      i. Outline - Odyssey client not connected
      ii. Red - Odyssey client not connected due to failed authentication
      iii. Black - Odyssey client connected, but authentication not in use
      iv. Blue - connected and authenticated

   b. Signal power status. The signal power button—the bar graph icon, displays the strength of signal between the device and access point. The more bars filled in, the stronger the signal. Strong signal shows all bars green-filled. Faint signal shows one bar green-filled. No signal displays all blank bars.

   c. Encryption key information. The encryption key button—the blue key icon, displays whether or not encryption keys are in use over this connection.
      i. Outline - data is not encrypted
      ii. Black - data is encrypted using static keys
      iii. Blue - data is encrypted using dynamic keys (802.X)

To Remove the Odyssey Client Software

There are two methods to remove the Odyssey Client Software.

Method One

1. Open the Control Panel.

2. Select Remove Programs.

3. Highlight the Odyssey Client.

4. Click on Remove.

Method Two

1. Re-run the Odyssey Client install program and click on Remove.